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#### **QUARTERLY REPORT - PUBLIC PAGE**

GTI PROJECT NUMBER 20460

# In-field Welding and Coating Protocols

DOT Prj# 208

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#### **Results and Conclusions**

GTI and EWI drafted a summary letter and protocol recommendations based on the research that has been performed. The main recommendations are:

# From a welding and coating perspective, this work resulted in several suggestions relevant to coating application:

- Weld <u>undercut</u> should be as shallow as possible, if not eliminated, with the <u>maximum</u> <u>acceptable depth of 0.031 in. (0.8 mm).</u> With the proper pre-coating preparation, this undercut depth would still allow for an acceptable coating thickness.
- Weld bead height should be no more than 0.197 in. (5 mm) with the preferred reinforcement height of 0.118 in. (3 mm). With the proper pre-coating preparation, this bead height would allow for an acceptable coating thickness across the transition from the weld bead to the pipe surface. If the deposited bead height is excessively high, then excessive cap should be removed and the weld toe dressed to assure a smooth transition.
- <u>Weld spatter should be reduced, if not totally removed,</u> prior to the application of the coating. This is normally performed by the welder or coating contractor determined by the pre-job meeting.
- The application of the coating should start no earlier than two hours after the weld is completed. Nondestructive inspection usually takes more than two hours to complete, so the proposed two hour time between weld completion and coating application should not be a constraint to the overall pipeline construction schedule.
- <u>Manufacturer's directions should be followed</u> during the coating application with a focus on providing a properly prepared surface to maximize a coating's effectiveness.

### **Plans for Future Activity**

In the coming quarter EWI and GTI will distribute the summary and recommendation report to various standard committees as well as to survey participants. GTI and EWI will also complete the final report.

Respectfully Submitted,

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End of Report